

1 We claim:

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3 1. An optical fiber receptacle adaptor comprising:
4 a receptacle end adapted for securing to an optical fiber receptacle
5 and for receiving a free end of the optical fiber receptacle, and
6 a port end adapted for receiving an optical ferrule and for urging the
7 optical ferrule into communication with the free end of the optical fiber receptacle.

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9 2. An optical fiber receptacle adaptor according to claim 1, further comprising
10 a locking module for securing the optical fiber receptacle adaptor to the optical
11 fiber receptacle.

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13 3. An optical fiber receptacle adaptor according to claim 2, wherein the
14 locking module comprises a first locking portion and a second locking portion, the
15 first locking portion and the second locking portion are each engageable with the
16 optical fiber receptacle adaptor, and define, when engaged with the optical fiber
17 receptacle adaptor, a through-hole between the first locking portion and the
18 second locking portion for engaging the optical fiber receptacle.

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20 4. An optical fiber receptacle adaptor according to claim 3, wherein the first
21 locking portion and the second locking portion are lockable to the optical fiber
22 receptacle adaptor by a formfitting locking mechanism.

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24 5. An optical fiber receptacle adaptor according to claim 4, wherein the
25 receptacle end comprises at least one undercut slot and each of the first locking
26 portion and the second locking portion comprises at least one protrusion having a
27 surface complementary to the undercut slot, wherein the undercut slot of the
28 optical fiber receptacle adaptor receives the protrusion of the at least one of the
29 first locking portion and the second locking portion and is locked therewith.

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1 6. An optical fiber receptacle adaptor according to claim 5, wherein the
2 undercut slot of the optical fiber receptacle adaptor receives the protrusion of
3 both the first locking portion and the second locking portion and is locked
4 therewith.

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6 7. An optical fiber receptacle adaptor according to claim 5, wherein the
7 undercut slot of the optical fiber receptacle adaptor and the respective
8 protrusions of the first locking portion and the second locking portion are
9 substantially cylindrically shaped.

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11 8. An optical fiber coupling system comprising:
12 an optical fiber receptacle having a free end, and
13 an optical fiber receptacle adaptor having a receptacle end adapted
14 for securing to the optical fiber receptacle and for receiving the free end of the
15 optical fiber receptacle, and a port end adapted for receiving an optical ferrule
16 and for urging the optical ferrule into communication with the free end of the
17 optical fiber receptacle.

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19 9. An optical fiber coupling system according to claim 8, further comprising a
20 locking module for securing the optical fiber receptacle adaptor to the optical fiber
21 receptacle.

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23 10. An optical fiber coupling system according to claim 9, wherein the locking
24 module comprises a first locking portion and a second locking portion, the first
25 locking portion and the second locking portion are each engageable with the
26 optical fiber receptacle adaptor, and define, when engaged with the receptacle
27 adaptor, a through-hole between the first locking portion and the second locking
28 portion for engaging the optical fiber receptacle.

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- 1 11. An optical fiber coupling system according to claim 10, wherein the first
2 locking portion and the second locking portion are lockable to the optical fiber
3 receptacle adaptor by a formfitting locking mechanism.
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- 5 12. An optical fiber coupling system according to claim 11, wherein the
6 receptacle end comprises at least one undercut slot and each of the first locking
7 portion and the second locking portion comprises at least one protrusion having a
8 surface complementary to the undercut slot, wherein the undercut slot of the
9 optical fiber receptacle adaptor receives the protrusion of the at least one of the
10 first locking portion and the second locking portion and is locked therewith.
- 11
- 12 13. An optical fiber coupling system according to claim 12, wherein the
13 undercut slot of the optical fiber receptacle adaptor receives the protrusion of
14 both the first locking portion and the second locking portion and is locked
15 therewith.
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- 17 14. An optical fiber coupling system according to claim 12, wherein the
18 undercut slot of the optical fiber receptacle adaptor and the respective
19 protrusions of the first locking portion and the second locking portion are
20 substantially cylindrically shaped.
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- 22 15. An optical fiber coupling system according to claim 10, wherein the optical
23 fiber receptacle comprises a collar portion extending from a flange portion
24 thereof, the collar portion extending through the through-hole defined between
25 the first locking portion and the second locking portion of the locking module
26 when the locking module is engaged with the optical fiber receptacle adaptor,
27 thereby securing the optical fiber receptacle adaptor to the optical fiber
28 receptacle.
- 29
- 30 16. An optical fiber coupling system according to claim 15, wherein respective
31 matching surfaces of the first locking portion and the second locking portion

1 surrounding the through-hole, when the first locking portion and the second
2 locking portion are engaged with the optical fiber receptacle adaptor, are
3 recessed, the recessed surfaces accommodating the flange portion of the optical
4 fiber receptacle when the locking module is engaged with the optical fiber
5 receptacle adaptor.

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7 17. An optical fiber coupling system according to claim 10, wherein first
8 locking portion and the second locking portion are lockable to the optical fiber
9 receptacle adaptor by one of a snap and a clip mechanism.

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11 18. A method for assembling an optical fiber coupling system, the method
12 comprising:

13 inserting an optical fiber receptacle into an receptacle opening at a
14 receptacle end of an optical fiber receptacle adaptor; and

15 securing the optical fiber receptacle to the receptacle end, thereby
16 assembling the optical fiber coupling system.

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18 19. A method for assembling an optical fiber coupling system according to
19 claim 18, wherein the securing of the optical fiber receptacle to the receptacle
20 end comprises attaching a locking module to the receptacle end, wherein the
21 locking module engages the optical fiber receptacle when attached to the
22 receptacle end.

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24 20. A method for assembling an optical fiber coupling system according to
25 claim 18, wherein the securing of the optical fiber receptacle to the receptacle
26 end comprises gluing the optical fiber receptacle to the receptacle end using
27 adhesive.

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